Title (en)

Diamond synthesis

Title (de)

Diamantsynthese

Title (fr)

Synthèse de diamants

Publication

EP 0523923 B1 19960320 (EN)

Application

EP 92306338 A 19920710

Priority

ZA 915453 A 19910712

Abstract (en)

[origin: EP0523923A1] A reaction vessel for use in producing large diamond crystals of good quality and yield includes a reaction volume and a reaction mass located in the volume. The reaction mass comprises a plurality of seed particles (24) located in or on a surface (26) in the reaction volume and a carbon source (22) separated from the seed particles (24) by a mass of metallic catalyst/solvent (20) for diamond synthesis. The mass (20) comprises alternating layers (30, 32) of carbon-rich and carbon-lean metallic catalyst/solvent which lie parallel or substantially parallel to the surface (26). There is also provided a mass (18) of alternating layers (30, 32) of carbon-rich and carbon-lean metallic catalyst/solvent. <IMAGE>

IPC 1-7

C01B 31/06; B01J 3/06

IPC 8 full level

B01J 3/06 (2006.01); **C30B 29/04** (2006.01)

CPC (source: EP KR US)

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Cited by

CN108722317A; EP0780153A1; CN103649382A; EP2670892A4

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DOCDB simple family (publication)

EP 0523923 A1 19930120; **EP 0523923 B1 19960320**; AT E135664 T1 19960415; AU 1953892 A 19930121; AU 647941 B2 19940331; CA 2073613 A1 19930113; CA 2073613 C 20011204; DE 69209175 D1 19960425; DE 69209175 T2 19960725; IE 75364 B1 19970827; IE 922262 A1 19930113; JP 3318002 B2 20020826; JP H06154578 A 19940603; KR 100216619 B1 19990816; KR 930002235 A 19930222; TW 203593 B 19930411; US 5980852 A 19991109

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